

EASA	AIRWORTHINESS DIRECTIVE
	AD No.: 2013-0087 Date: 09 April 2013 Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) No 216/2008 on behalf of the European Community, its Member States and of the European third countries that participate in the activities of EASA under Article 66 of that Regulation.
This AD is issued in accordance with EU 748/2012, Part 21.A.3B. In accordance with EC 2042/2003 Annex I, Part M.A.301, the continuing airworthiness of an aircraft shall be ensured by accomplishing any applicable ADs. Consequently, no person may operate an aircraft to which an AD applies, except in accordance with the requirements of that AD, unless otherwise specified by the Agency [EC 2042/2003 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [EC 216/2008, Article 14(4) exemption].	
Design Approval Holder's Name: ATR-GIE AVIONS de TRANSPORT RÉGIONAL	Type/Model designation(s): ATR 42 and ATR 72 aeroplanes
TCDS Number:	EASA A.084
Foreign AD:	Not applicable
Supersedure:	This AD supersedes EASA AD 2009-0159-E dated 20 July 2009.
ATA 56	Windows – Cockpit Forward Side Windows – Inspection / Replacement
Manufacturer(s):	ATR-GIE Avions de Transport Régional (formerly Aerospatiale – Aeritalia, Aerospatiale – Alenia, Aerospatiale ATR – Alenia, EADS ATR – Alenia).
Applicability:	ATR 42 and ATR 72 aeroplanes, all certified models, all manufacturer serial numbers.
Reason:	In 2009, a Left-Hand (LH) forward side glass window of an ATR 72-212 aeroplane blew out while performing a ground pressure test. The investigation results revealed some anomalies on the forward side window at the level of the z-bar on the windows external side and at the level of the inner retainer on the windows internal side. Such anomalies are considered as precursors of this kind of failure. Air or water leakages between the z-bar and the outer glass ply, or between the inner retainer and inner glass ply indicate the presence of deteriorating structural components in the window. Neither ATR nor PPG Aerospace have authorized repairs on the window z-bar or z-bar sealant. Any attempted repairs on these forward side window z-bars and/or z-bar sealants could lead to a similar event as described above. In-flight loss of a forward side window would cause rapid cabin decompression, possibly resulting in flight crew incapacitation and consequent reduced control, or loss of control of the aeroplane, and cause the risk of injury to persons on the ground. The loss of a forward side window while the aeroplane is on the ground, due to differential cabin pressure, could result in injury to aeroplane occupants or to persons outside the aeroplane. To address this potential unsafe condition, EASA issued AD 2009-0159-E to

	require repetitive inspections of the affected LH and right-hand (RH) cockpit forward side glass windows and, in case discrepancies are found as defined in PPG Aerospace Service Bulletin (SB) NP-158862-001, the replacement of the window(s). Since that AD was issued, a cockpit forward RH-side window blew out during flight on an ATR72-212 aeroplane. Degradation of the window is considered to have been the cause for this failure. For the reasons described above, this AD retains the requirements of EASA AD 2009-0159-E, which is superseded, adds another inspection interval of 750 flight cycles (FC) and requires to accomplish the inspections in accordance with the instructions of Revision 1 of PPG Aerospace SB NP-158862-001, which provides more information on examples of discrepant conditions. This AD also requires the removal from service of the affected Part Number (P/N) NP158862-1 and P/N NP158862-2 cockpit forward side windows, which constitutes terminating action for the repetitive inspections required by this AD.						
Effective Date:	23 April 2013						
Required Action(s) and Compliance Time(s):	Required as indicated, unless already accomplished: (1) For all ATR 42 and ATR 72 aeroplanes that are equipped with PPG Aerospace cockpit forward side glass windows P/N NP158862-1 and/or P/N NP158862-2: Within 2 000 FC since first installation of the cockpit forward side window on an aeroplane, or within 10 days after the effective date of this AD, whichever occurs later, and, thereafter, at intervals not exceeding 550 flight hours (FH) or 750 FC, whichever occurs first, inspect the cockpit forward side window to detect any damage or discrepancies in accordance with the instructions of PPG Aerospace SB NP-158862-001 Revision 1. Note1: If, for a given cockpit forward side window, the FC accumulated since its first installation on an aeroplane cannot be established, the total FC accumulated by the aeroplane must be used to determine the compliance time for the initial inspection of the affected cockpit forward side window. (2) If, during any inspection as required by paragraph (1) of this AD, one of the conditions, as specified in Table 1 of this AD, is found, reduce the interval of the inspection as required by paragraph (1) to 50 FC or 7 days, whichever occurs later. Table 1 – Detected Conditions <table border="1"> <tr> <td>a.</td><td>sealant separation between the Z-bar and the outer glass ply, with depth less than 4 mm (0.160 in)</td></tr> <tr> <td>b.</td><td>sealant separation between inboard retainer and inner glass ply, with depth less than 7,5 mm (0.300 in) and cumulative length less than 300 mm (12.000 in)</td></tr> <tr> <td>c.</td><td>window showing both sealant separation between the Z-bar and the outer ply, and separation between inboard retainer and inner glass ply, common to the same holes location with a length less than 225 mm (8.860 in), and not covering the entire arc of a window corner</td></tr> </table> (3) If, during any inspection as required by paragraph (1) or (2) of this AD, any discrepant condition, as defined in PPG SB NP-158862-001 Revision 1, is found, before the next pressurized flight, or within 10 days after the inspection, whichever occurs first, replace the affected window(s) in accordance with the instructions of ATR42/72 Job Instruction Card AMM	a.	sealant separation between the Z-bar and the outer glass ply, with depth less than 4 mm (0.160 in)	b.	sealant separation between inboard retainer and inner glass ply, with depth less than 7,5 mm (0.300 in) and cumulative length less than 300 mm (12.000 in)	c.	window showing both sealant separation between the Z-bar and the outer ply, and separation between inboard retainer and inner glass ply, common to the same holes location with a length less than 225 mm (8.860 in), and not covering the entire arc of a window corner
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	JIC 56-12-00 RAI 10000. Note 2: For unpressurized flight conditions and limitations, refer to ATR Master Minimum Equipment List (MMEL) item 21-30-1 and Dispatch Deviation Guide (DDG) item 21-30-1.(4) (4) Within 30 days after each inspection where damage or discrepancies are found, submit a detailed report of the findings to ATR. (5) Replacement of a cockpit forward side window as required by paragraph (3) of this AD with a cockpit forward side window P/N NP158862-1 (LH) or P/N NP158862-2 (RH), as applicable, does not constitute terminating action for the repetitive inspections required by this AD. (6) Before 01 January 2020, replace each PPG Aerospace P/N NP-158862-1 (LH) and P/N NP-158862-2 (RH) cockpit forward side window with another approved cockpit forward side window. For alternative window installations, consult ATR documentation, or contact ATR. Modification of an aeroplane by replacing both PPG Aerospace P/N NP158862-1 (LH) and P/N NP158862-2 (RH) cockpit forward side windows with other approved windows constitutes terminating action for the repetitive inspections required by this AD for that aeroplane. (7) From 01 January 2020, do not install on any aeroplane PPG Aerospace P/N NP158862-1 (LH) or P/N NP158862-2 (RH) cockpit forward side windows.
Ref. Publications:	PPG Aerospace SB NP-158862-001 Revision 1 dated 10 January 2013. The use of later approved revisions of this document is acceptable for compliance with the requirements of this AD. ATR42/72 Job Instruction Card AMM JIC 56-12-00 RAI 10000.
Remarks:	1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD. 2. This AD was posted on 12 March 2013 as PAD 13-046 for consultation until 26 March 2013. No comments were received during the consultation period. 3. Enquiries regarding this AD should be referred to the Safety Information Section, Executive Directorate, EASA. E-mail: ADs@easa.europa.eu. 4. For any question concerning the technical content of the requirements in this AD, please contact: ATR - GIE Avions de Transport Régional, Continued Airworthiness Service, Tel.: +33 (0)5 62 21 62 21 - Fax: +33 (0) 5 62 21 67 18; E-mail: continued.airworthiness@atr.fr.